What is claimed:

1. A solder preform for attaching an optical fiber having a diameter to a fiber attach pad, the solder preform comprising a body including solder at least on a bottom surface thereof, the body having a groove extending along a first face from a first end to a second, the groove being larger in size than the optical fiber to allow alignment of the optical fiber within the groove.

2. A solder preform according to claim 1, wherein the height of the groove is larger than the diameter of the optical fiber, allowing a range of clearance above and below the optical fiber.

3. A solder preform according to claim 1, wherein the width of the groove is larger than the diameter of the optical fiber, allowing a range of clearance on at least a side of the optical fiber.

4. A solder preform according to claim 1, wherein the body is formed as a geometric solid with at least one substantially flat face.

5. A solder preform according to claim 4, wherein the geometric solid is selected from a group consisting of a rectangular box, a cubical box, a cylinder, a semi-cylinder, a semi-sphere, a pyramid, and a cone.

6. A solder preform according to claim 1, wherein the body is formed from a metallic material.

7. A solder preform according to claim 1, wherein the body is formed from a glass material.

8. A solder preform according to claim 1, wherein the body is formed into a substantially rectangular box having a height H as 0.38mm +/- 0.05mm, a groove height GH as 0.26mm to 0.29mm, a width W as 0.5mm to 1.5mm, a groove width GW as 0.15mm to 0.23mm, and a length L as 0.5mm to 1.5mm, the groove providing 25 μm to 105 μm of total clearance between the optical fiber and the width of the groove, a bottom

clearance of 25 μm to 100 μm underneath the optical fiber, and a top clearance of 35 μm to 140 μm above the optical fiber.

9. A method of making a solder preform for attaching an optical fiber having a diameter to a fiber attach pad, the method comprising the steps of:

a) providing a block of solder material;

b) stamping a shape from the block of solder material; and

c) forming a groove on a first face of the shape extending from a first end to a second end, the groove being larger in width than that diameter of the optical fiber.

10. A method according to claim 9, wherein step c is performed as part of step b.

11. A method according to claim 9, wherein step c is performed by grinding the groove on the first face of the shape extending from the first end to the second end.

12. A method according to claim 9, wherein the step of stamping includes forming the shape from a group consisting of a substantially rectangular box, a substantially cubical box, substantially a cylinder, substantially a semi-cylinder, substantially a sphere, substantially a semi-sphere, and substantially a cone.

13. A method of using a solder preform for attaching an optical fiber having a diameter to a fiber attach pad, the method comprising the steps of:

a) providing the solder preform;

b) placing the optical fiber over the fiber attach pad;

c) placing the solder preform over the optical fiber and onto the fiber attach pad; and

d) applying laser radiation in a manner such that the optical fiber is shielded from the laser radiation by the solder preform.

14. The method of claim 13, further comprising the step of aligning the optical fiber to receive a desirable optimized optical signal strength from an adjacent optical component.

15. The method of claim 13, further comprising the step of aligning the optical fiber to provide a desirable optimized optical signal strength to an adjacent optical component.